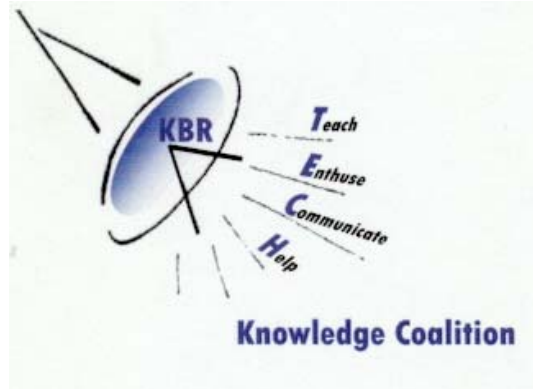# KBR TechKnowledge Coalition

2003
Information Technology Assessment and Plan

KBR Region, Nebraska
Keya Paha, Brown and Rock Counties

Mission Statement
"To provide opportunities to pursue lifelong learning and cultural and economic enrichment through increased access and application of the latest information technology for citizens in each community."

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Committee members: Brown County: Todd Anderson, Gail Irwin, Richard Albrecht, Betty Shelton, Sue Brown; Rock County: Chris Nielsen, Linda May, Evelyn Ost, Dave Jacobs, Sheila Chance, Stacie Knox; Keya Paha County: Jim Ripley, Patsy Cook, Judy Cronk, Sue Weston, Ron Heerten

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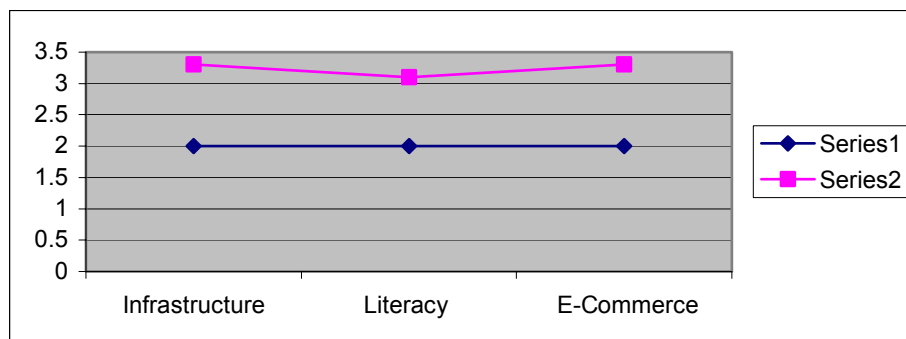## KBR Region, Nebraska
Keya Paha, Brown and Rock Counties

The KBR TechKnowledge Coalition Technology Plan is a single plan developed for three counties. The information technology committee assessed the three counties as one unit to determine the current level of e-readiness (blue line). Then the committee focused on each individual county to select the target level of e-readiness and set the priorities.

The survey results as well as the community forums reflected many similarities from community to community within the region. However, target levels selected by the public varied slightly so the committee averaged the selected levels to set the target level for the plan (pink line).

The committee selected three priority areas for the technology plan based on public input. These areas are: 1) Telecommunication Infrastructure, 2) Technology Literacy and Access and (3) Economic Development and E-Commerce.

Current and Target Levels of E-Readiness

Telecommunications Infrastructure

Infrastructure is the basis to all communication. Getting quality infrastructure to the rural communities of Nebraska is a constant challenge. Recognizing that many of the residents in the KBR region do not live within city or village limits, it is difficult to put all citizens in a single category.

The information technology committee used the following scale to evaluate telecommunications infrastructure.

1	Cable modem, DSL or wireless services are not available in the community.
2	Some homes and businesses have cable modem, DSL or wireless service available.
3	Many residences and businesses have cable modem, DSL or wireless service available.
4	All residences and businesses have cable modem, DSL or wireless service available. Satisfaction with broadband services is high.

Current E-Readiness Level
On a scale of 1 to 4, our region is a level 2 in telecommunication infrastructure. There are eleven separate telephone exchanges in the three county region. The Information Technology Committee sites this as an obstacle for efficient infrastructure. Also, many households within these counties are located in sparsely populated areas up to 65 miles from an incorporated town. Therefore, it is difficult for telecommunication providers to justify the expense of connecting those households. There is unused bandwidth laid along the highways to these households, which could potentially provide access.

Of the surveys returned, 87% of the households in our region utilize a dial-up connection to the Internet. 79% indicate a desire for faster Internet connection. 54% of those indicate faster service is not available while 48% do not know if it's available.

Strengths
The small, locally owned providers have upgraded their telecommunication equipment and several of our communities receive affordable, high-speed Internet. Also provided is affordable cellular service, however, there are areas of dead space.

The three secondary schools in the region have high-speed access through a T1 line with service provided through the local Education Service Unit #17, which demonstrates efforts being made to share services regionally.

Resources and Assets
Current telecommunication companies, ESU #17, KBR Rural Public Power and the two area hospitals have committed resources to meet the needs of area residents. All local governments are on-line and endorse technology as a communication link to bridge the miles to our region.

Target E-Readiness Level
In two to five years our average regional goal is to be at level 3.3.

Action Plan
1. Use current data to inform providers of concerns on the following issues:
   - High Internet traffic during peak times of the day limits access. Busy signals are often received when attempting to go on-line.
   - Affordable high-speed Internet is not available in many areas of our region, especially outside city/village boundaries.

2. Create a directory of Internet Service Providers that lists services and cost, contact numbers, number of servers/modems so individuals can make an educated decision on selecting a provider.

3. Continue dialogue with Congressman Osborne's office concerning:
   - Access to dark fiber along highways.
   - Encourage cellular providers to share resources.
   - Connect Distance Learning pods to make classes/meetings accessible statewide.

4. Encourage cellular providers to provide more coverage by sighting these safety issues:
   - Emergency pagers are unreliable because of dead space.
   - Many of our students drive several miles to school because there is no bus service.
   - Local residents and tourists who depend on cell service may not have accessibility in an emergency situation.

Technology Literacy and Access

Technology cannot be utilized to its potential without a clear understanding of how to use it and the availability of equipment.

The information technology committee used the following scale to evaluate technology literacy and access.

1	Less than 50% of households are online and public access to computers and the Internet is very limited.
2	Approximately 50% of households are online and public access to computers and the Internet is available in at least one location twenty or more hours a week.
3	Over 50% of households are online and public access to computers and the Internet is available in at least one location at times convenient for most users.
4	At least 75% of households are online and at least 75% of adults are Internet users. Mobile access to the Internet through WIFI networks is available in several areas in the community.

Current E-Readiness Level
On a scale of 1 to 4, our region is a level 2 in technology literacy and access. 65% of the returned surveys indicated having a computer in the household. 87% (the largest group) indicate using it for Internet and E-mail. 65% indicate using the Internet daily. Only 13% of our returned surveys indicated usage of public access computers. Only 6% indicate using public access computers at public libraries. The IT committee recognizes there is a margin of error produced by the survey results. The committee believes this response could indicate most computer owners submitted completed surveys. According to the librarians on the tech committee, the public access computers are in use and have a waiting line during peak hours. This would indicate a need for more computers as well as extended hours that are convenient for users.

Security/Privacy/Identification theft was the number one technology related concern indicated on the returned surveys.

Strengths
The school systems in the three counties have strong technology programs. Northeast Community College works with the three counties to provide adult education classes in our schools and libraries or other facilities that can provide adequate room. Some local providers will make special accommodations to assist in conducting a class.

Resources and Assets
The publicly funded offices in our region cooperate by providing room and equipment for continuing education. These include, but are not limited to,

schools, Educational Service Unit #17, North Central Nebraska RC&D, North Central Development Center, hospitals, libraries and the extension office.

50% of the responses on the survey stated not having computer classes in elementary, high school or college and only 27% have taken computer classes offered locally through continuing education. The survey does indicate a desire for advanced technology training indicating those that have computer skills would like to continue training. 53% of respondents indicated a desire to know more about opportunities through technology.

Target E-Readiness Level
In two to five years our average regional goal is to be at level 3.1.

Action Plan
1. Create a directory of personnel to provide services and repair/training and resources. It will also include technology terminology, public library hours and available classes.

2. Coordinate classes that provide continuing education for local technology personnel and suppliers.

3. Develop and maintain website for technology plan that includes resource links.

Economic Development and E-Commerce

Businesses must endorse technology as a tool to keep our rural area in the competitive market.   Our region recognizes technology as an opportunity for entrepreneurs.

The information technology committee used the following scale to evaluate technology literacy and access.

1	Economic development efforts do not address Information Age businesses.
2	There is some recognition in the community that information technology is an economic development tool. Some local businesses are using information technology effectively to improve productivity and expand markets.
3	Economic development efforts are beginning to target Information Age businesses. Most small businesses are using information technology effectively to improve productivity and expand markets. At least 50% of businesses have a Web site and 85% of businesses are online.
4	Economic development efforts are tied to the needs of Information Age businesses. Nearly all small businesses have integrated information technology into their business processes and plans.

Current E-Readiness Level
On a scale of 1 to 4, our region is a level 2 in economic development and E-Commerce. Of the surveys returned, 28% of business owners do not have a computer in their business and only 84% of the businesses that have a computer use it for recording keeping. 20% of business owners indicate they currently have a website. Of the remaining businesses that responded only 45% indicated a desire to have a website.

Strengths
There is a general knowledge that technology is a means to economic stability. 84% of returned surveys indicate technology is vital or very important to the future of our region. Congressman Osborne and economic development groups continue to address the need for affordable, high-speed access to provide opportunities to rural residents. Current information provided through Web sites welcomes visitors and highlights our quality-of-life encouraging relocation to our region.

Resources and Assets
Congress Osborne's E-Commerce Workshop provides virtual examples of technology being integrated into businesses and governmental services. USDA Title VI provides funds to develop broadband services in areas that have no access to high-speed Internet. Locally owned businesses that are directly connected to the community feel the effects of economic development and therefore recognize its importance.

Target E-Readiness Level
In two to five years our average regional goal is to be at level 3.3.

Action Plan
1. Survey businesses, through the chamber newsletter, to ascertain information technology needs.

2. Educate businesses on the benefits technology can provide and inform businesses about the technology plan by attending chamber meetings and writing articles for the chamber newsletter.

3. Conduct IT opportunities/training targeted by category to business owners, i.e. livestock/ag, retail, services, etc.